CLAIMS

1. A machine for balancing rotating bodies, in particular motor vehicle wheels, by applying balancing masses onto a rotating application surface (11a) pertaining to the body, comprising:

a support and rotation means (20) for supporting the body (10) and rotating it about its axis of rotation,

first sensor means (30) for determining the axial position of at least one chosen transverse balancing plane (P1, P2) in which to apply the balancing mass, and the radial position of points on the application surface (11a) on the body (10) which lie in said balancing plane (P1, P2),

second sensor means (40) for determining the angular position of the body (10),

means for determining the imbalance factors on the body (10),

a processor means arranged to process the data originating from the first and second sensor means and from the imbalance determination means and to determine the value of the balancing mass and the position of its point of application on the application surface (11a),

characterised by comprising a means (50) arranged to acquire images originating from the application surface (11a), and a display means (60) connected to the processor means in order to display said images on a screen (61) accessible to the operator, the processor means indicating on the screen (61) the position of the point of application of the balancing mass in relation to the image of the application surface (11a) which appears on it.

2. A balancing machine as claimed in claim 1, characterised in that to indicate the point of application of the balancing mass, the processor

means defines an optical pointer (62) which appears visibly on the screen (61) at said point of application, superposed on the acquired image of the application surface (11a).

3. A balancing machine as claimed in claim 1, characterised by comprising a means for halting the rotation of the support and rotation means, connected to the second sensor means and arranged to halt the body (10) in an angular position such that the point of application of the balancing mass on the body (10) falls within any region of the field visible on the screen.

4. A method for using a machine for balancing rotating bodies, in particular motor vehicle wheels, by applying balancing masses to a rotating application surface (11a) pertaining to the body (10), comprising the following stages:

firstly determining, by first measurement sensor means (30), the axial position of at least one chosen transverse balancing plane (P1, P2) in which to apply a respective balancing mass, and the radial position of points on the application surface (11a) corresponding with said balancing plane (P1, P2), while the machine monitors the angular position of the body (10);

the body (10) is rotated and by suitable means the machine determines the imbalance factors on the body (10), these being processed by a processor means together with the data originating from the first and second sensor means, the value of each balancing mass and the position of its point of application on the application surface (11a) being determined,

characterised in that images originating from the application surface (11a) on the body (10) are acquired by an image acquisition means (50), said images being displayed on the screen (61) accessible to the operator, on the screen (61) there also being indicated the position of application of the balancing mass in relation to the image of the application surface (11a) which appears on it, for application of the balancing masses the body (10) being brought into an angular position such that the point of application of the masses falls within any region of the field visible on the screen (61).